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| EXAMINER |
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BROMELL, ALEXANDRIA Y

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2167

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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|                              |  |                                   |  |
|------------------------------|--|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/758,768     | <b>Applicant(s)</b><br>NGO ET AL. |  |
|                              | <b>Examiner</b><br>ALEXANDRIA Y. BROMELL | <b>Art Unit</b><br>2167           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1 – 25 are pending in this Office Action.

#### ***Response to Arguments***

Applicant's arguments, see Remarks, filed June 18, 2009, with respect to the rejection(s) of claim(s) 1 – 22 and 24 under Frederick J. Duske, Jr. (U.S. Patent 6,992,991) and in view of Aaron D. Hanson et al. (U.S. Patent Publication 20030120811) have been considered and are not persuasive. If Applicant files a Request for Continued Examination, Applicant is invited to contact Examiner for an interview to clarify these issues.

Applicant argues that:

A. "Hanson et al. is not concerned with the same type of priority and data structures as those claimed," (Remarks, page 11).

B. "Unlike the instant claimed subject matter, Hanson et al. is not directed to the "transmission of messages" or to the determination of whether first and second information elements include a first and second priority level indication, respectively. Thus, the "priority" disclosed at paragraphs [0089] and [0175] of Hanson et al., cited in the Office Action, relate to "association priority" or "application priority within an association," but not the priority of first and second information elements, as claimed," (Remarks, page 12).

C. "Priority levels in Hanson et al. are not related to first and second information elements, wherein a first information element is stored in a first data structure in a

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telemetry device when it is determined that the first information element includes a first priority level indication, and a second information element is stored in a second data structure in the telemetry device when it is determined that the second information element includes a second priority level indication,” (Remarks, page 12).

D. "The skilled artisan would not have sought to combine Hanson et al. with Duske, Jr. et al.,” (Remarks, page 13).

E. “Duske, Jr. et al. fails to disclose the storage of two separate information elements in two separate data structures,” (Remarks, page 15).

F. “Hanson et al., also, does not disclose that a determination that a message, or information element, includes a priority level indication is a precondition for storing the message, or information element, in a first or second data structure,” (Remarks, page 15).

G. The subject matter of claims 23 and 25 is not obvious, (Remarks, page 16).

Examiner respectfully disagrees all of the allegations as argued. Examiner, in her previous office action, gave a detailed explanation of the claimed limitations and pointed out exact locations in the cited prior art.

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. See MPEP 2111 [R-1].

#### Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be ‘given the broadest reasonable interpretation consistent with the specification.’ Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the

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examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Examiner addresses applicant's arguments as follows:

A. Although Applicant argues that Hanson et al. is not concerned with the same type of priority and data structures as those claimed because it is directed to mobile devices, Applicant has not specifically claimed more than "a telemetry device."

In the instant specification paragraph [0002], Applicant defines telemetry services by referencing fleet and asset management of vehicles. Applicant further explains, "an approach for tracking mobile telemetry devices over a two-way wireless network in support of fleet and asset management is provided," (instant specification, para. [0009]).

Using this application of telemetry devices, Examiner believes that the application of mobile devices to teach the instant claims is reasonable.

B. Hanson et al. is directed to the transmission of messages. Hanson explicitly teaches that:

The Remote Procedure Call protocol generates transactions into messages that can be sent via the standard network transport protocol and infrastructure. These RPC messages contain the entire network transaction initiated by an application running on the Mobile End System--enabling the Mobility Management Server and Mobile End System to keep connection state information synchronized at all times--even during interruptions of the physical link connecting the two. In the preferred embodiment of the present invention providing RPC's, the proxy server and the Mobile End Systems share

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sufficient knowledge of each transaction's state to maintain coherent logical database about all shared connections at all times, (para. [0030]).

Therefore, Hanson teaches that system transactions are transmitted into messages in order to track and store transaction state.

Examiner thanks Applicant for recognizing the “priority” disclosed at paragraphs [0089] and [0175] of Hanson. Priority is based upon associations, order, sequence, importance, or with respect to another object or event. However, there is some confusion with respect to the priority of the first and second information elements as claimed. If the priority of the first and second information elements is not with respect to each other or another element, it is unclear how priority is determined.

C. Because priority is based upon associations, order, sequence, importance, or with respect to another object or event, there is some confusion with respect to the priority of the first and second information elements as claimed. If the priority of the first and second information elements is not with respect to each other or another element, it is unclear how Applicants determine priority.

D. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Hanson teaches a system for data communication using a mobility management server to store states and complex session management, para. [0018]. On the other hand, Duske teaches an advanced messaging system for initiated mobile terminals that operate without providing excessive loading on a satellite, column 2, lines 30 – 34.

It would have been obvious to one of ordinary skill in the art to modify the teachings of Hanson with the teachings of Duske in order to efficiently manage data message transmissions (column 2, lines 41 - 67). Duske tracks messages and message logs (figure 8 - 5), where the messages have a status (or priority) and are sent to a queue (figure 8 – 11).

E. Examiner agrees that Duske does not disclose the storage of two separate information elements in two separate data structures. However, Hanson teaches that messages are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9.

F. Hanson teaches that the RPC protocol engine handles requests to determine where they should be stored and processed after messages are initially stored in the global queue, Paragraphs [0122], [0123], [0132].

G. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

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references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Hanson teaches a system for data communication using a mobility management server to store states and complex session management, para. [0018]. On the other hand, Duske teaches an advanced messaging system for initiated mobile terminals that operate without providing excessive loading on a satellite, column 2, lines 30 – 34. Klein teaches that as a check routine is executed upon main power disconnection, the current operating state of the program need not be checked during restoration.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Duske and Hansen with the teachings of Klein in order to save information in the device if external power fails (Klein, column 2, lines 57 - 67).

For the above reasons, Examiner relies on her previous rejection, therefore, this rejection is made Final.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 - 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederick J. Duske, Jr. et al. (U.S. Patent 6,992,991, hereinafter, Duske) in view of Aaron D. Hanson et al. (U.S. Patent Publication 2003/0120811, hereinafter, Hanson).

With respect to claim 1, Duske teaches storing a first information element in a device log in the telemetry device (i.e. messages are stored in the device message logs in either an outgoing message log (OML) or saved message log (SML), column 28, lines 1-9, see FIG 8-5), determining whether the first information element includes a first priority level indication (i.e. when user creates message, they must specify the message priority which determines when the message should be sent, column 20, lines 40-63), storing a second information element in the device log (i.e. messages are stored in the device message logs in either an outgoing message log (OML) or saved message log (SML), column 28, lines 1-9), determining whether the second information element includes a second priority level indication (i.e. when user creates message, they must specify the message priority which determines when the message should be sent,

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column 20, lines 40-63), transmitting a first message based on the first information element from the telemetry device for receipt by an operation unit (i.e. message is transmitted by the AMC (adaptive mobile communication), received by the satellite network, column 7, line 56 – column 8, line 3), and after transmitting the first message, transmitting a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications (i.e. messages will be sent in order with respect to their priority levels and the position in the queue, column 30, lines 64-67, see FIG 8-11).

FIG. 8-5

|                                    |          |   |  |             |                        |
|------------------------------------|----------|---|--|-------------|------------------------|
| Q)UICK SEND                        | M)ESSAGE | M)ESSAGE LOGS   | A)DDRESS                               | T)RANSCIVER | T(E)RMINAL             |
| AMERICA                            |          | PRINT<br>VIEW INCOMING<br>VIEW OUTGOING<br>VIEW SAVED<br>VIEW NETWORK | TE CORPORATION (AMSC)<br>SERVICE (MMS) |             |                        |
| UNREAD: 3; SENDING: 2              |          | MAIN MENU   |  |             |                        |
| STATUS MESSAGES ARE DISPLAYED HERE |          |   |  |             | 04/08/95 - 12:24PM EST |

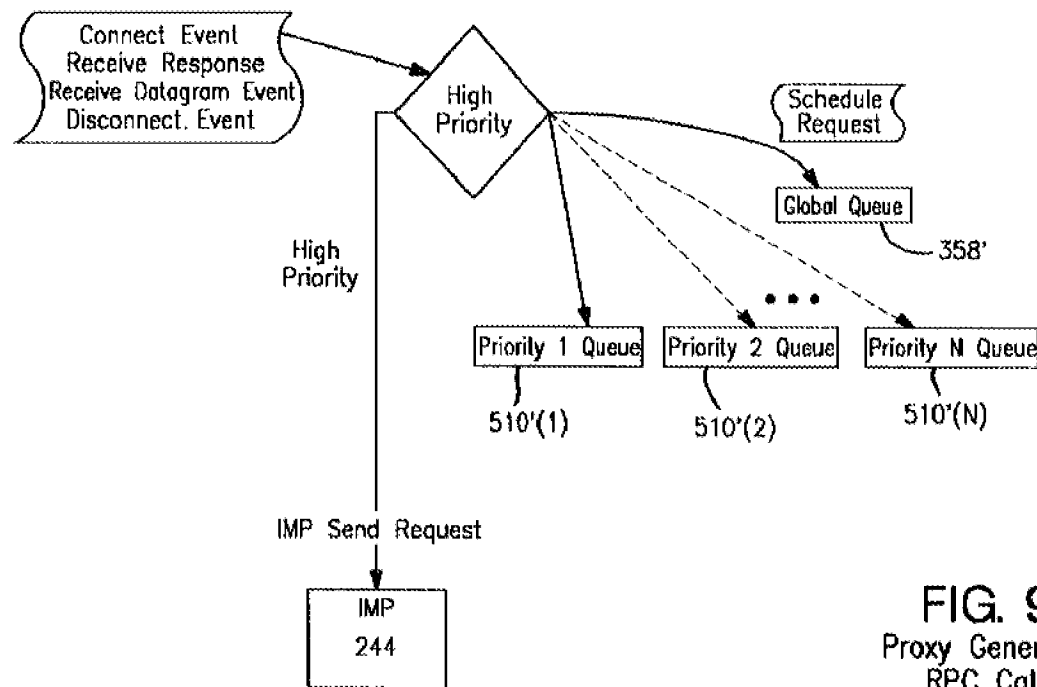
FIG. 8-11

| QUICK SEND                         | MESSAGE  | MESSAGE LOGS         | ADDRESS      | TRANSCIVER              | TERMINAL   |
|------------------------------------|----------|----------------------|--------------|-------------------------|------------|
| UNREAD                             | PRIORITY | FROM                 | MESSAGE TYPE | DATE/TIME RECEIVED      | REPLY REQ. |
| •                                  | HIGH     | JANE                 | DIRECTIONS   | 03/20/95 - 11:23 AM EST |            |
| •                                  | MED      | SAM                  | DELAY        | 03/21/95 - 03:15 PM EST | •          |
| •                                  | MED      | JOE                  | ROUTING      | 03/21/95 - 09:30 AM EST |            |
|                                    | MED      | PAMELA               | DIRECTIONS   | 03/22/95 - 10:49 AM EST | •          |
|                                    | MED      | SUZZANNA             | PICK UP      | 03/20/95 - 11:23 AM EST |            |
| UNREAD: 3; SENDING: 2              |          | INCOMING MESSAGE LOG |              |                         |            |
| STATUS MESSAGES ARE DISPLAYED HERE |          |                      |              | 04/08/95 - 12:24PM EST  |            |

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Duske does not explicitly disclose the storage of two separate information elements of different levels in two separate data structures as claimed. However, Hansen teaches storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication (i.e. messages are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9), and storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication (i.e. messages are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9).

Duske and Hansen are analogous art because they are from the same field of endeavor of providing a user with mobile communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Duske with the teachings of Hansen in order to store individual messages according to their discrete priority, (Hansen, [0170]).



**FIG. 9**  
Proxy Generated  
RPC Calls

With respect to claim 2, the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue (i.e. first data structure may be saved log queue, second data structure may be outgoing log queue, and device log may be the network log queue, column 28, lines 1-21 and FIG 8-5).

With respect to claim 3, the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication (i.e. first data structure may be saved log queue, second data structure may be outgoing log queue, and device log may be the network log queue, column 28, lines 1-21 and FIG 8-5, and the messages are identified and transmitted with respect to their priority, which identifies their position in a queue, column 20, lines 60-63).

With respect to claim 4, determining whether a third information element absent from the device log includes a third priority level indication (i.e. if the information element is not in the device log, it has not been sent by the satellite, column 4, lines 40-45), storing the third information element in a third data structure when it is determined that the third information element includes the third priority level indication (i.e. when user creates message, they must specify the message priority which determines when the message should be sent, column 20, lines 40-63), and after transmitting the second message, transmitting a third message based on the third information element, wherein the ordering of transmission is further based on the first, second, and third level priority indications (i.e. messages will be sent in order with respect to their priority levels and the position in the queue, column 30, lines 64-67, see FIG 8-11).

With respect to claim 5, storing a fourth information element in the device log (i.e. messages are stored in the device message logs in either an outgoing message log (OML) or saved message log (SML), column 28, lines 1-9, see FIG 8-5), determining whether the fourth information element includes the first priority level indication (i.e. when user creates message, they must specify the message priority which determines when the message should be sent, column 20, lines 40-63), determining whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication (i.e. system determines if there is space for a new message (which includes priority), column 28, lines 23-38), and discarding the fourth information element from consideration of storage in the first data structure when the step of determining whether

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the first data structure includes storage available determines that storage for storing the fourth information element is unavailable in the first data structure (i.e. if the user is attempting to save the message and this is not possible because the system has exceeded its maximum size, the software will inform the user that this is not possible, column 28, lines 47-51).

With respect to claim 6, the first data structure and the second data structure are stored in a dynamic memory included in the telemetry device, and the device log is stored in a flash memory included in the telemetry device (i.e. AMC log information is stored in flash memory, column 6, lines 15-20, and the data modified by user is stored in dynamic RAM, column 16, lines 10-13).

With respect to claim 7, receiving a request for data of the telemetry device (i.e. network requests information from AMC, column 16, lines 55-61 ), and transmitting a data message based on content of the device log in response to the request (i.e. AMC sends an automatic reply with the requested information, column 16, lines 55-61).

With respect to claim 8, Duske teaches a processor configured to determine whether the first information element includes a first priority level indication, to determine whether the second information element includes a second priority level indication (i.e. when user creates message, they must specify the message priority which determines when the message should be sent, column 20, lines 40-63), to transmit a first message based on the first information element from the telemetry device for receipt by an operation unit (i.e. message is transmitted by the AMC (adaptive mobile communication), received by the satellite network, column 7, line 56 –

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column 8, line 3), and after transmitting the first message, to transmit a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications (i.e. messages will be sent in order with respect to their priority levels and the position in the queue, column 30, lines 64-67, see FIG 8-11).

Duske does not explicitly disclose the storage of two separate information elements of different levels in two separate data structures as claimed. However, Hansen teaches storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication (i.e. messages are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9), and storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication (i.e. messages are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9).

Duske and Hansen are analogous art because they are from the same field of endeavor of providing a user with mobile communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Duske with the teachings of Hansen in order to store individual messages according to their discrete priority, (Hansen, [0170]).

With respect to claim 9, the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue (i.e. first data structure may be saved log queue, second data structure may be outgoing log queue, and device log may be the network log queue, column 28, lines 1-21 and FIG 8-5).

With respect to claim 10, the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication (i.e. first data structure may be saved log queue, second data structure may be outgoing log queue, and device log may be the network log queue, column 28, lines 1-21 and FIG 8-5, and the messages are identified and transmitted with respect to their priority, which identifies their position in a queue, column 20, lines 60-63).

With respect to claim 11, the processor is further configured to determine whether a third information element absent from the device log includes a third priority level indication (i.e. if the information element is not in the device log, it has not been sent by the satellite, column 4, lines 40-45), to store the third information element in a third data structure when it is determined that the third information element includes the third priority level indication (i.e. when user creates message, they must specify the message priority which determines when the message should be sent, column 20, lines 40-63), and after transmitting the second message, to transmit a third message based on the third information element, wherein the ordering of transmission is further based on the first, second, and third level priority indications (i.e. messages will be sent in



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order with respect to their priority levels and the position in the queue, column 30, lines 64-67, see FIG 8-11).

With respect to claim 12, the device log includes a fourth information element (i.e. messages are stored in the device message logs in either an outgoing message log (OML) or saved message log (SML), column 28, lines 1-9, see FIG 8-5), and the processor is further configured to determine whether the fourth information element includes the first priority level indication (i.e. when user creates message, they must specify the message priority which determines when the message should be sent, column 20, lines 40-63) to determine whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication (i.e. system determines if there is space for a new message (which includes priority), column 28, lines 23-38), and to discard the fourth information element from consideration of storage in the first data structure when the determination of whether the first data structure includes storage available determines that storage for storing the fourth information element is unavailable in the first data structure (i.e. if the user is attempting to save the message and this is not possible because the system has exceeded its maximum size, the software will inform the user that this is not possible, column 28, lines 47-51).

With respect to claim 13, a dynamic memory including the first data structure and the second data structure, and a flash memory including the device log (i.e. AMC log information is stored in flash memory, column 6, lines 15-20, and the data modified by user is stored in dynamic RAM, column 16, lines 10-13).

With respect to claim 14, processor is further configured to receive a request for data of the telemetry device, and to transmit a data message based on content of the device log (i.e. network requests information from AMC, column 16, lines 55-61, and AMC sends an automatic reply with the requested information, column 16, lines 55-61).

With respect to claim 15, Duske teaches storing a first information element in a device log in the telemetry device (i.e. messages are stored in the device message logs in either an outgoing message log (OML) or saved message log (SML), column 28, lines 1-9, see FIG 8-5), determining whether the first information element includes a first priority level indication (i.e. when user creates message, they must specify the message priority which determines when the message should be sent, column 20, lines 40-63), determining whether the second information element includes a second priority level indication (i.e. when user creates message, they must specify the message priority which determines when the message should be sent, column 20, lines 40-63), transmitting a first message based on the first information element from the telemetry device for receipt by an operation unit (i.e. message is transmitted by the AMC (adaptive mobile communication), received by the satellite network, column 7, line 56 – column 8, line 3), and after transmitting the first message, transmitting a second message based on the second information element from the telemetry device for receipt by the operation unit, wherein an ordering of transmission is based on the first and second level priority indications (i.e. messages will be sent in order with respect to their priority levels and the position in the queue, column 30, lines 64-67, see FIG 8-11).

Duske does not explicitly disclose the storage of two separate information elements of different levels in two separate data structures as claimed. However, Hansen teaches storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication (i.e. messages are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9), and storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication (i.e. messages are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9).

Duske and Hansen are analogous art because they are from the same field of endeavor of providing a user with mobile communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Duske with the teachings of Hansen in order to store individual messages according to their discrete priority, (Hansen, [0170]).

With respect to claim 16, the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue (i.e. first data structure may be saved log queue, second data structure may be outgoing log queue, and device log may be the network log queue, column 28, lines 1-21 and FIG 8-5).

With respect to claim 17, the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication (i.e. first data structure may be saved log queue, second data structure may be outgoing log queue, and device log may be the network log queue, column 28, lines 1-21 and FIG 8-5, and the messages are identified and transmitted with respect to their priority, which identifies their position in a queue, column 20, lines 60-63).

With respect to claim 18, determining whether a third information element absent from the device log includes a third priority level indication (i.e. if the information element is not in the device log, it has not been sent by the satellite, column 4, lines 40-45), storing the third information element in a third data structure when it is determined that the third information element includes the third priority level indication (i.e. when user creates message, they must specify the message priority which determines when the message should be sent, column 20, lines 40-63), and after transmitting the second message, transmitting a third message based on the third information element, wherein the ordering of transmission is further based on the first, second, and third level priority indications (i.e. messages will be sent in order with respect to their priority levels and the position in the queue, column 30, lines 64-67, see FIG 8-11).

With respect to claim 19, storing a fourth information element in the device log (i.e. messages are stored in the device message logs in either an outgoing message log (OML) or saved message log (SML), column 28, lines 1-9, see FIG 8-5), determining whether the fourth information element includes the first priority level indication (i.e. when user creates message, they must specify the message priority which determines

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when the message should be sent, column 20, lines 40-63), determining whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication(i.e. system determines if there is space for a new message (which includes priority), column 28, lines 23-38), and discarding the fourth information element from consideration of storage in the first data structure when the step of determining whether the first data structure includes storage available determines that storage for storing the fourth information element is unavailable in the first data structure (i.e. if the user is attempting to save the message and this is not possible because the system has exceeded its maximum size, the software will inform the user that this is not possible, column 28, lines 47-51).

With respect to claim 20, the first data structure and the second data structure are stored in a dynamic memory included in the telemetry device, and the device log is stored in a flash memory included in the telemetry device (i.e. AMC log information is stored in flash memory, column 6, lines 15-20, and the data modified by user is stored in dynamic RAM, column 16, lines 10-13).

With respect to claim 21, receiving a request for data of the telemetry device, and transmitting a data message based on content of the device log in response to the request (i.e. network requests information from AMC, column 16, lines 55-61, and AMC sends an automatic reply with the requested information, column 16, lines 55-61).

With respect to claim 22, Duske teaches storing a plurality of information elements in a device log in the telemetry device (i.e. messages are stored in the device

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message logs in either an outgoing message log (OML) or saved message log (SML), column 28, lines 1-9, see FIG 8-5), a selecting one of the plurality of data structures based on one of the priority indicators, and transmitting a message including one of the information elements of the selected one of the data structures from the telemetry device for receipt by an operation unit (i.e. message is transmitted by the AMC (adaptive mobile communication), received by the satellite network, column 7, line 56 – column 8, line 3, and messages will be sent in order with respect to their priority levels and the position in the queue, column 30, lines 64-67, see FIG 8-11).

Duske does not explicitly disclose the storage of two separate information elements of different levels in two separate data structures as claimed. However, Hansen teaches storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication (i.e. messages are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9), and storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication (i.e. messages are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9).

Duske and Hansen are analogous art because they are from the same field of endeavor of providing a user with mobile communication. At the time of the invention, it

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would have been obvious to one of ordinary skill in the art to modify the teachings of Duske with the teachings of Hansen in order to store individual messages according to their discrete priority, (Hansen, [0170]).

With respect to claim 24, Duske teaches means for storing a plurality of information elements in a device log in the telemetry device (i.e. messages are stored in the device message logs in either an outgoing message log (OML) or saved message log (SML), column 28, lines 1-9, see FIG 8-5), means for selecting one of the plurality of data structures based on one of the priority indicators, and means for transmitting a message including one of the information elements of the selected one of the data structures from the telemetry device to an operation unit (i.e. message is transmitted by the AMC (adaptive mobile communication), received by the satellite network, column 7, line 56 – column 8, line 3, and messages will be sent in order with respect to their priority levels and the position in the queue, column 30, lines 64-67, see FIG 8-11).

Duske does not explicitly disclose the storage of two separate information elements of different levels in two separate data structures as claimed. However, Hansen teaches storing the first information element in a first data structure in the telemetry device when it is determined that the first information element includes the first priority level indication (i.e. messages are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9), and storing the second information element in a second data structure in the telemetry device when it is determined that the second information element includes the second priority level indication (i.e. messages

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are stored in corresponding queues according to their priority level, [0089], where priorities are weighted and handled according to their weighting, [0175], also see Fig. 9).

Duske and Hansen are analogous art because they are from the same field of endeavor of providing a user with mobile communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Duske with the teachings of Hansen in order to store individual messages according to their discrete priority, (Hansen, [0170]).

Claims 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederick J. Duske, Jr. et al. (U.S. Patent 6,992,991, hereinafter, Duske) in view of Aaron D. Hanson et al. (U.S. Patent Publication 2003/0120811, hereinafter, Hanson). in view of Thomas Klein (U.S. Patent 6,178,523, hereinafter, Klein).

With respect to claim 23, the combination of Duske and Hanson teach storing the plurality of data structures in a memory including the device log. The combination of Duske and Hanson does not explicitly disclose how the telemetry device receives power when the external power fails as claimed.

However, Klein teaches how power is supplied to the telemetry device when an external power source of the telemetry device fails (i.e. if the external, main power source of the device fails, the memory stores information, column 2, lines 57 – 67, and column 3, lines 1 - 2).

Duske, Hansen, and Klein are analogous art because they are from the same field of endeavor of providing a user with communication. At the time of the invention, it



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would have been obvious to one of ordinary skill in the art to modify the teachings of Duske and Hansen with the teachings of Klein in order to save information in the device if external power fails (Klein, column 2, lines 57 - 67).

With respect to claim 25, the combination of Duske and Hanson teach storing the plurality of data structures in a memory including the device log. The combination of Duske and Hanson does not explicitly disclose how the telemetry device receives power when the external power fails as claimed.

However, Klein teaches how power is supplied to the telemetry device when an external power source of the telemetry device fails (i.e. if the external, main power source of the device fails, the memory stores information, column 2, lines 57 – 67, and column 3, lines 1 - 2).

Duske, Hansen, and Klein are analogous art because they are from the same field of endeavor of providing a user with communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the teachings of Duske and Hansen with the teachings of Klein in order to save information in the device if external power fails (Klein, column 2, lines 57 - 67).

### ***Conclusion/Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDRIA Y. BROMELL whose telephone number is (571)270-3034. The examiner can normally be reached on M - R 9 - 3.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexandria Y Bromell  
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October 6, 2009

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